

# UniOP MD02F-02 and MD02R-04

Compact HMI devices with 9 function keys, numerical keypad and 20 characters display.

## **Highlights**

- Shows up to 2 or 4 rows, 20 characters of information
- Choice of Vacuum Fluorescent or Monochorme LCD
- 9 user programmable function keys with slide-in legends
- 10 user programmable LED indicators
- Multilanguage project capability
- Dual-driver communication
- Connection to industrial bus systems and Ethernet with optional modules
- IP65 front panel protection



The MD02F-02 and MD02R-04 HMI panels are compact low cost products yet extremely rich in functionality. The products support the rich common functionality of the UniOP operator panels:

- Powerful and intuitive programming with the UniOP Designer software
- Dual-driver communication capability,
- Support of more than 130 communication drivers for industrial devices
- Optional modules for fieldbus systems (Profibus DP, DeviceNet, CANopen, Interbus) and Ethernet
- Display data in numerical, text and bargraph format
- Recipe data storage
- Keyboard macro editor
- Alarms and historical alarm list
- Eight level password protection



## **Technical Data**

The product is available in two versions that differ only by display type.

	Display	Colors	Backlight	Lifetime	
MD02F-02	VFD	-	-		
MD02R-04	LCD	-	LCD	100.000 hours	

Display		
Rows/columns	2/20	4/20
Character height	5 mm	5 mm
User definable characters	<u>-</u>	8
Contrast regulation	<u>-</u>	Software
		,
Memory		
User memory	512	k KB
User memory expansion	512 KB	
Front panel		
Function keys		9
System keys	1	0
Touch screen	_	-
User LED's	-	9
System LED's	-	2
Connections		
PC/Printer port	Y	es
PLC port	RS-232, RS-422, I	RS-485, CL 20 mA
Aux port (fieldbus and Ethernet	Yes, requires of	optional module
connection)		
External keyboard port	No	
Programming speed	9600 ÷ 38400 bps	
Functionality		
Number of variables per page	Unli	mited
Dual-driver capability	Y	es
Recipe memory	16	KB
Data acquisition and trends		No
UniNet network	Client/Server	
Alarms		)24
Event list	256	
Alarm info page		es
Password		es
Battery		ım), non rechargeable, user
		e type or equivalent compatible
		perature of the product
Hardware RTC		es
Screen saver		No .
Buzzer		No
Power supply voltage	18 ÷ 30 VDC	



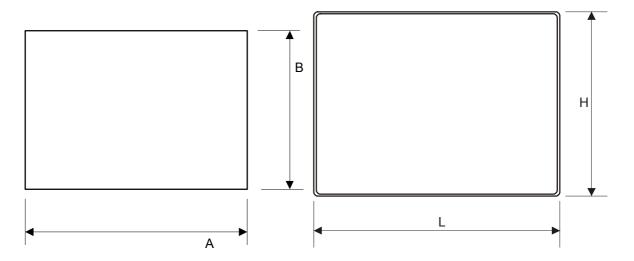
Max power consumption	0.25 A at 24 VDC	
Fuse	2 A (user replaceable)	
Weight	~ 0.9 Kg	
Operating temperature		
-0045, -0050	0 ÷ +50 °C	
-00A6	0 ÷ +60 °C	
-00A7	-20 ÷ +60 °C	
Storage temperature	-20 ÷ +70 °C	
Operating and storage humidity	5 ÷ 85 % RH non-condensing	
Protection class	IP65 (front panel)	

The products are designed for installation in an industrial environment in compliance with the regulations:

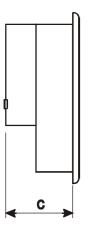
Emitted interference EN 61000-6-4, 2001 Noise immunity EN 61000-6-2, 2001

## **Front Dimensions and Cutout**

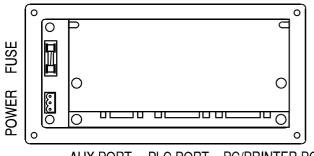
Faceplate LxH Cutout AxB Cutout depth C	195x98 mm 174x78 mm	7.67x3.85 " 6.85x3.43 "
-0045, -00A7	74 mm	2.91 "
-0050	82 mm	3.20 "
Max panel thickness	5 mm	0.20"







#### **Connections**



AUX PORT PLC PORT PC/PRINTER PORT

The product is compatible with all standard TCM and SCM modules. To access the slot for the modules, remove the rear cover of the product

The backup battery is accessible for replacement after removing the main module of the unit.

The standard programming cable CA114 can be used with this product.

## **Indicators and keypad**

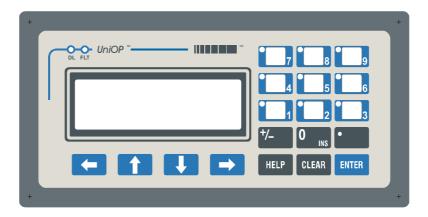
There are several dedicated LED indicators on the front panel of the unit. Functions are described in the table below.

A customizable legend strip is included.

Elements not listed in this chapter are reserved for future use.



LED	Color	Status	Meaning
DL gr		OFF	No keys are pressed and no errors
	green	BLINK	Communication error
		ON	While any key is pressed (visual feedback)
		OFF	No hardware problem detected; battery OK
FL	red	BLINK	Battery low
		ON	Hardware fault



The RDA mapping of LED indicators is shown in the table below.

<b>RDA Bit</b>	LED on Key
L18	1
L19	2
L20	3
L21	4
L22	5
L23	6
L24	7
L24	8
L26	9

The RDA mapping of all keys is standard.

Function keys associated to keys 1 to 9 have a slide-in legend. Legend strips in laser printable form are available as accessories.



## **Ordering Information**

MD02F-02-0045	Compact low-cost HMI with 2x20 VFD display
MD02R-04-0045	Compact low-cost HMI with 4x20 LCD display
MD02R-04-00A6	Compact low-cost HMI with 4x20 LCD display, extended operating
	temperature range
MD02R-04-00A7	Compact low-cost HMI with 4x20 LCD display, extended operating
	temperature range
MD02R-04-0050	Compact low-cost HMI with 4x20 LCD display, compatible with
	local I/O
R-PRINT2297	Printable legends (5 A4 foils, 8 sets of legends per foil)

Tn196

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